Year:	2015
State:	Kansas
Cooperative Agreement Name:	Infrastructure
Cooperative Agreement Number:	15-8420-1223-CA
Project Funding Period:	July 1, 2015 – June 30, 2016
Project Report:	CAPS Infrastructure Report
Project Document Date:	July 1, 2015 – June 30, 2016
Cooperators Project Coordinator:	Laurinda Ramonda
Name:	Plant Protection and Weed Control
Agency:	Kansas Department of Agriculture
Address:	6531 SE Forbes Avenue, Suite B
City/ Address/ Zip:	Topeka, Kansas 66619
Telephone:	785-564-6698
E-mail:	laurinda.ramonda@kda.ks.gov

Quarterly Report	☐
Semi-Annual Accomplishment Report	☐
Annual Accomplishment Report	☒

A. Compare actual accomplishments to objectives established as indicated in the workplan. When the output can be quantified, a computation of cost per unit is required when useful

- April 23, 2015 - Agreement finalized

ACTIVITIES

Possible Meetings and Outreach Tradeshows as Per Workplan

Meeting or Tradeshow	Month Planned	Month Occurred	SSC Attended and Where
National CAPS Conference	December	None in 2015	None in 2015
Horticultural Inspection Society Meeting	October	October	No, The Dells, Wisconsin
Central Plant Board Meeting	March	April	Yes, Fargo, North Dakota
State CAPS committee meetings	(1 time a year)	June	Yes, Manhattan, Kansas
Shade Tree Conference (Kansas Arborist Association) - (outreach)	January	January	Yes, Topeka, Kansas
Western Landscape and Nursery Tradeshow (outreach)	January	January	No, (other staff attended) Educational booth set up, Kansas City
Great Plains Growers Conference (outreach)	January	January	Yes, St. Joe, Missouri
Topeka Garden Show (outreach)	February	February	Yes, Topeka, Kansas
Buprestid/Cerambycid Beetle Taxonomic Training Workshop	July	July	Yes, West Lafayette, IN

Committee Service:

- Kansas CAPS Committee
- 2016 Farmbill Proposal Review Committee

Other Survey Work:

- September 30, 2015 – Girdled trap tree peeling in Douglas County
- October 14, 2015 – Girdled trap tree peeling in Miami County
- October 21, 2015 – Girdled trap tree peeling in Atchison and Jefferson County

- May 25, 2016 – Assisted Jeff Hash, Kansas State Plant Health Director, release 612 female *Tetrastichus*, 308 adult female *Spathius agrili*, 1250 female *Oobius* in 13 Oobinators for emerald ash borer biocontrol at Wyandotte County Lake

- June 15, 2016 – Assisted Jeff Hash, Kansas State Plant Health Director, release 494 female *Tetrastichus agrili* in 11 bolts and 1000 female *Oobius* in 10 Oobinators for emerald ash borer biocontrol at Wyandotte County Lake

- June 22, 2016 – Assisted Jeff Hash, Kansas State Plant Health Director, release 451 female *Tetrastichus agrili* in 7 bolts, 1000 female *Oobius* in 4 Oobinators and 308 adult female *Spathius agrili* in 8 cups for emerald ash borer biocontrol at Wyandotte County Lake.

- June 29, 2016 – Assisted Barry Cole, USDA, release 200 female *Tetrastichus agrili* in 11 bolts, 600 female *Oobius* in 6 Oobinators and 459 adult female *Tetrastichus agrili* in 2 cups for emerald ash borer biocontrol at Wyandotte County Lake.

OUTREACH AND EDUCATION

- **Great Plains Growers Conference** – January 7-9, 2016 – St. Joe, Missouri – educational booth –Greg Chrislip and Laurinda Ramonda

- **Shade Tree Conference (Kansas Arborist Association)** – January 13-15, 2015 – Topeka, Kansas – educational booth – Laurinda Ramonda, Jennifer Smith, Greg Chrislip

- **The Western Nursery and Landscape Association Tradeshow** – January 21-22, 2016 – Kansas City, Missouri – educational booth –Jennifer Smith, Jeremy Maples, Laurinda Ramonda (organized)

- **Kansas Garden Show –** February 12-14, 2015 – Topeka, Kansas – educational booth –Tom Sanders, Jennifer Smith, Scott Marsh, Greg Chrislip, Laurinda Ramonda

- **Heartland Park Racetrack** – April 25, 2016 – Topeka, Kansas – spoke with them about campers bringing firewood to the drag races in May and left educational materials.

- **Heartland Park Racetrack** – May 2, 2016 – Topeka, Kansas – finalized approval for firewood survey at National Hotrod Association Drag Races on May 20

Interviews (TV/Radio/Newspaper/Magazines):

- none planned

Outreach materials (Pamphlets/ brochures/ posters):

- none at this time

Publications:

- 2016 Spring Nursery Newsletter (attached at end of report)

Public Service Announcements (PSA):

- none planned

MEETINGS

- **USDA-APHIS-PPQ, KDA Meeting** – August 26, 2015 – Meeting to discuss 2016 trapping for gypsy moth after European gypsy moth find July 27, 2015 – Attended by Stacey Scott, Erin Stiers, Jeff Vogel, Greg Chrislip, Laurinda Ramonda

- **Plant Protection and Weed Control Staff Meeting** – September 3, 2015 – Topeka, KS

- **Kansas Department of Agriculture** – September 23, 2015 – meeting on health insurance – Topeka, KS

- **Kansas Department of Agriculture** – November 4, 2015 – regional meeting – Topeka, KS

- **Fiscal meeting** – November 17, 2015 – meeting with fiscal to discuss end of project funds – Manhattan, KS

- **Plant Protection and Weed Control Staff Meeting** – December 2-4, 2015 – Manhattan, KS

- **Plant Protection and Weed Control Staff Meeting** – February 23-25, 2016 – Topeka, KS

- **Central Plant Board Meeting** – April 11-14, 2016 – Fargo, North Dakota – Laurinda Ramonda – attended State Survey Coordinator breakout session

- **State CAPS Committee Meeting** – June 1, 2016 – Manhattan, Kansas

Conference calls:

- July 21, 2015 **–** Plant Protection and Weed Control Monthly Conference Call
- July 29, 2015 – FY16 EAB Survey Conference Call
- August 10, 2015 **–** Plant Protection and Weed Control Monthly Conference Call
- August 24, 2015 – Central Plant Board State Survey Coordinator Conference Call
- September 3, 2015 **–** Plant Protection and Weed Control Monthly Conference Call
- October 1, 2015 – 2016 Farmbill Reviewer conference call
- October 12, 2015 **–** Plant Protection and Weed Control Monthly Conference Call
- November 17, 2015 **–** Plant Protection and Weed Control Monthly Conference Call
- December 16, 2015 – 2016 Emerald Ash Borer Survey Conference Call
- February 10, 2016 – Central Plant Board State Survey Coordinator Conference Call
- February 15, 2016 **–** Plant Protection and Weed Control Monthly Conference Call
- March 9, 2016 – Gypsy Moth Risk Model Rollout Webinar and Conference Call
- March 14, 2016 **–** Plant Protection and Weed Control Monthly Conference Call
- April 19, 2016 – Greenhouse Certification Program Conference Call and Webinar
- May 9, 2016 **–** Plant Protection and Weed Control Monthly Conference Call
- June 20, 2016 **–** Plant Protection and Weed Control Monthly Conference Call

Conferences:

- none at this time

Webinars:

- March 9, 2016 – Gypsy Moth Risk Model Rollout Webinar
- April 19, 2016 – Greenhouse Certification Program Webinar

TRAINING

- **Buprestid/Cerambycid Beetle Taxonomic Training Workshop** – July 14-17, 2015 – Purdue University, West Lafayette, Indiana – Attended by Laurinda Ramonda and Greg Chrislip (state entomologist)
- **Permit Management Branch Practice** – November 10, 2015 – emergency management exercise
- **Permit Management Branch Emergency Exercise** – December 14, 2015 – emergency management exercise
- **Animal Disease Response Training** – May 18, 2016 – Manhattan, Kansas

OTHER

Gypsy Moth (data entered into NAPIS for USDA)

Pest	Area	Survey Method	Total Traps	Positive Traps	Pest	Area	Survey Method	Total Traps	Positive Traps
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Anderson	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Anderson	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Atchison	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Atchison	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Barton	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Barton	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Bourbon	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Bourbon	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Brown	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Brown	Trap;Delta Pheromone (Paper)	2	0

Asian Gypsy Moth - Lymantria dispar asiatica	KS - Butler	Trap;Delta Pheromone (Paper)	12	0	Gypsy Moth - Lymantria dispar	KS - Butler	Trap;Delta Pheromone (Paper)	12	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Chase	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Chase	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Cherokee	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Cherokee	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Clay	Trap;Delta Pheromone (Paper)	5	0	Gypsy Moth - Lymantria dispar	KS - Clay	Trap;Delta Pheromone (Paper)	5	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Cloud	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Cloud	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Coffey	Trap;Delta Pheromone (Paper)	5	0	Gypsy Moth - Lymantria dispar	KS - Coffey	Trap;Delta Pheromone (Paper)	5	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Cowley	Trap;Delta Pheromone (Paper)	4	0	Gypsy Moth - Lymantria dispar	KS - Cowley	Trap;Delta Pheromone (Paper)	4	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Crawford	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Crawford	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Dickinson	Trap;Delta Pheromone (Paper)	10	0	Gypsy Moth - Lymantria dispar	KS - Dickinson	Trap;Delta Pheromone (Paper)	10	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Doniphan	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Doniphan	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Douglas	Trap;Delta Pheromone (Paper)	30	0	Gypsy Moth - Lymantria dispar	KS - Douglas	Trap;Delta Pheromone (Paper)	30	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Ellis	Trap;Delta Pheromone (Paper)	4	0	Gypsy Moth - Lymantria dispar	KS - Ellis	Trap;Delta Pheromone (Paper)	4	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Ellsworth	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Ellsworth	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Finney	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Finney	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Ford	Trap;Delta Pheromone (Paper)	6	0	Gypsy Moth - Lymantria dispar	KS - Ford	Trap;Delta Pheromone (Paper)	6	0

Asian Gypsy Moth - Lymantria dispar asiatica	KS - Franklin	Trap;Delta Pheromone (Paper)	11	0	Gypsy Moth - Lymantria dispar	KS - Franklin	Trap;Delta Pheromone (Paper)	11	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Geary	Trap;Delta Pheromone (Paper)	27	0	Gypsy Moth - Lymantria dispar	KS - Geary	Trap;Delta Pheromone (Paper)	27	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Greenwood	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Greenwood	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Harper	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Harper	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Harvey	Trap;Delta Pheromone (Paper)	8	0	Gypsy Moth - Lymantria dispar	KS - Harvey	Trap;Delta Pheromone (Paper)	8	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Hodgeman	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Hodgeman	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Jackson	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Jackson	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Jefferson	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Jefferson	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Johnson	Trap;Delta Pheromone (Paper)	56	0	Gypsy Moth - Lymantria dispar	KS - Johnson	Trap;Delta Pheromone (Paper)	56	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Kingman	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Kingman	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Labette	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Labette	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Leavenworth	Trap;Delta Pheromone (Paper)	9	0	Gypsy Moth - Lymantria dispar	KS - Leavenworth	Trap;Delta Pheromone (Paper)	9	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Lincoln	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Lincoln	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Lyon	Trap;Delta Pheromone (Paper)	6	0	Gypsy Moth - Lymantria dispar	KS - Lyon	Trap;Delta Pheromone (Paper)	6	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Marion	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Marion	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy	KS -	Trap;Delta	2	0	Gypsy	KS -	Trap;Delta	2	0

Moth - Lymantria dispar asiatica	Marshall	Pheromone (Paper)			Moth - Lymantria dispar	Marshall	Pheromone (Paper)		
Asian Gypsy Moth - Lymantria dispar asiatica	KS - McPherson	Trap;Delta Pheromone (Paper)	10	0	Gypsy Moth - Lymantria dispar	KS - McPherson	Trap;Delta Pheromone (Paper)	10	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Miami	Trap;Delta Pheromone (Paper)	5	0	Gypsy Moth - Lymantria dispar	KS - Miami	Trap;Delta Pheromone (Paper)	5	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Mitchell	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Mitchell	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Montgomery	Trap;Delta Pheromone (Paper)	11	0	Gypsy Moth - Lymantria dispar	KS - Montgomery	Trap;Delta Pheromone (Paper)	11	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Morris	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Morris	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Nemaha	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Nemaha	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Osage	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Osage	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Ottawa	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Ottawa	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Pratt	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Pratt	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Reno	Trap;Delta Pheromone (Paper)	4	0	Gypsy Moth - Lymantria dispar	KS - Reno	Trap;Delta Pheromone (Paper)	4	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Republic	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Republic	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Rice	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Rice	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Riley	Trap;Delta Pheromone (Paper)	24	0	Gypsy Moth - Lymantria dispar	KS - Riley	Trap;Delta Pheromone (Paper)	24	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Saline	Trap;Delta Pheromone (Paper)	28	0	Gypsy Moth - Lymantria dispar	KS - Saline	Trap;Delta Pheromone (Paper)	28	0

Asian Gypsy Moth - Lymantria dispar asiatica	KS - Scott	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Scott	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Sedgwick	Trap;Delta Pheromone (Paper)	65	0	Gypsy Moth - Lymantria dispar	KS - Sedgwick	Trap;Delta Pheromone (Paper)	65	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Shawnee	Trap;Delta Pheromone (Paper)	30	0	Gypsy Moth - Lymantria dispar	KS - Shawnee	Trap;Delta Pheromone (Paper)	30	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Sherman	Trap;Delta Pheromone (Paper)	6	0	Gypsy Moth - Lymantria dispar	KS - Sherman	Trap;Delta Pheromone (Paper)	6	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Sumner	Trap;Delta Pheromone (Paper)	11	0	Gypsy Moth - Lymantria dispar	KS - Sumner	Trap;Delta Pheromone (Paper)	11	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Thomas	Trap;Delta Pheromone (Paper)	6	0	Gypsy Moth - Lymantria dispar	KS - Thomas	Trap;Delta Pheromone (Paper)	6	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Wabaunsee	Trap;Delta Pheromone (Paper)	2	0	Gypsy Moth - Lymantria dispar	KS - Wabaunsee	Trap;Delta Pheromone (Paper)	2	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Wilson	Trap;Delta Pheromone (Paper)	3	0	Gypsy Moth - Lymantria dispar	KS - Wilson	Trap;Delta Pheromone (Paper)	3	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Woodson	Trap;Delta Pheromone (Paper)	1	0	Gypsy Moth - Lymantria dispar	KS - Woodson	Trap;Delta Pheromone (Paper)	1	0
Asian Gypsy Moth - Lymantria dispar asiatica	KS - Wyandotte	Trap;Delta Pheromone (Paper)	64	0	Gypsy Moth - Lymantria dispar	KS - Wyandotte	Trap;Delta Pheromone (Paper)	64	0

B. If appropriate, explain why objectives were not met.*

C. Where appropriate, explain any cost overruns or unobligated funds in excess of $1,000. *

D. Supporting Documents

Minutes from CAPS Committee Meeting on June 1, 2016

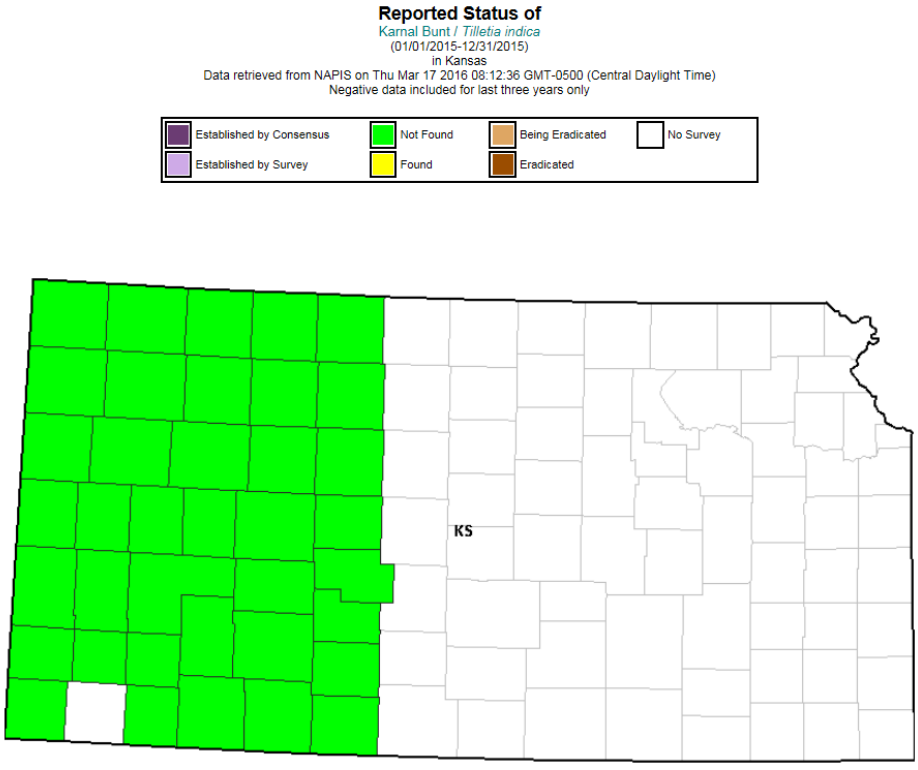
The state CAPS Committee met on June 1, 2016 at 9:00 am at the Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan. In attendance were: Craig Webb-USDA-APHIS-PPQ, Amanda Kaye-USDA-APHIS-PPQ, Judy O'Mara-KSU Plant Pathology, Megan Kennelly-KSU Plant Pathology, Doug Jardine-KSU, Walt Fick-KSU, Sharon Dobesh-KSU, Chris Steffen-KDWPT, Ryan Armbrust-KFS, Jeff Vogel-KDA, Greg Chrislip-KDA, Scott Marsh-KDA, Gaelle Hollandbeck and Laurinda Ramonda-KDA.

Introductions were made.

2015 Surveys and Results:

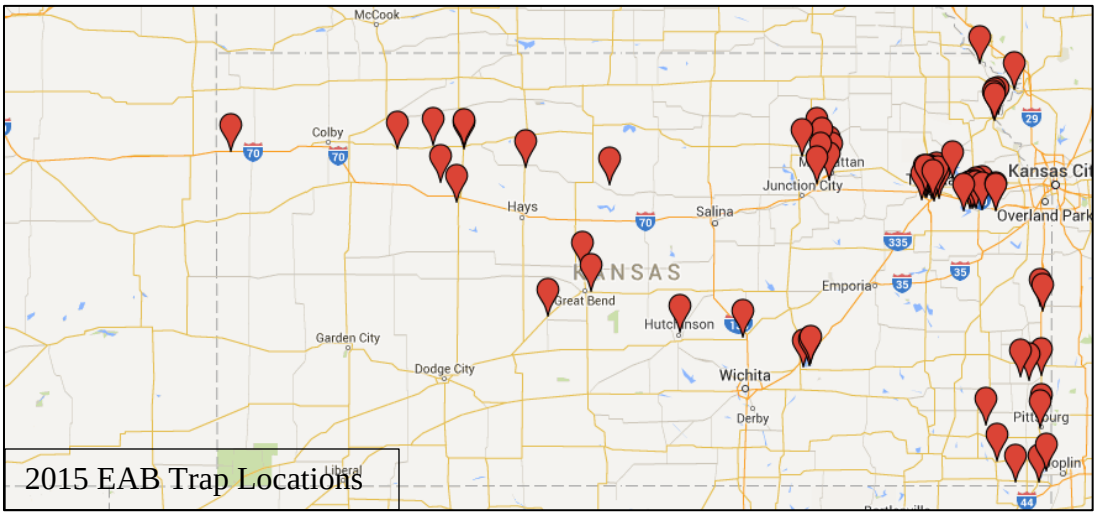
CAPS surveys and line items:

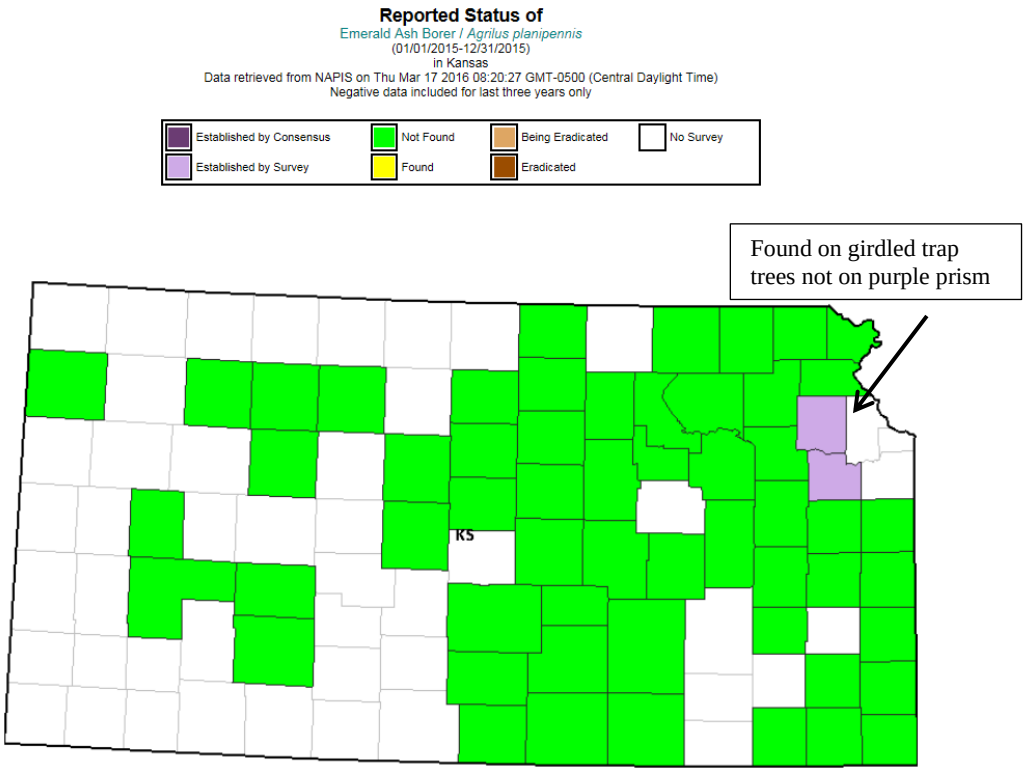
- Karnal bunt
  - 142 samples in 40 western counties were planned to be collected. 136 samples in 38 western counties were actually collected.
  - Collection of samples occurred from June 22 – July 2, 2015
  - 3 staff – Jon Appel, Bob Buhler, Tom Sanders collective samples
  - All samples sent to lab in Arizona and all were negative



This map only represents pest survey data submitted to the NAPIS database by participating states in the Cooperative Agricultural Pest Survey (CAPS) program with USDA, APHIS, PPQ. Data is based on survey observation by calendar year. CERIS does not certify the accuracy or completeness of this map. "Survey in Progress" does not imply that all counties are expected to report.

- Emerald ash borer
  - Trapping - March 10 – August 31, 2015
  - 71 traps (64 purple prism, 7 Lindgren funnel) were placed in 23 counties
  - 7 staff utilized – Bob Buhler, Cherie Copeland, Greg Chrislip, Jeremy Maples, Jennifer Smith, Tom Sanders and Jeff Vogel
  - 63 traps remained by the end of the survey - All traps negative.

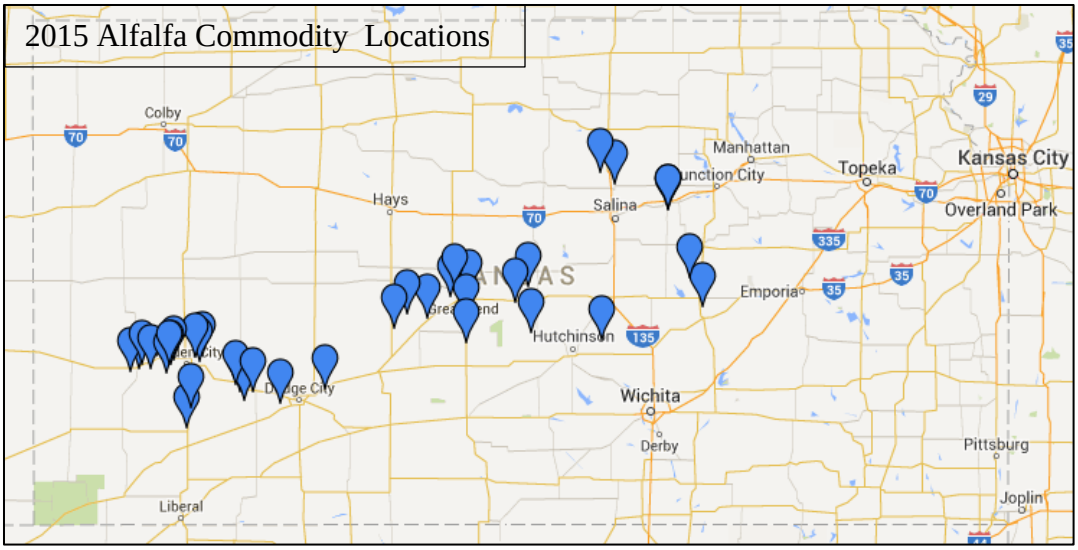




- Alfalfa Commodity
  - Dates of trapping – May 15 – September 14, 2015 in 39 locations with 156 traps in 13 counties. All traps negative
  - 1 seasonal staff - Alaycia Ryan
  - Approximately 20,925 moths from 197 traps were sent to the Washington Department of Agriculture for identification

	Common Name	**Scientific Name**	**Trapping Method**
Pest:	silver y moth	*Autographa gamma*	Bucket
	old world bollworm	*Helicoverpa armigera*	Bucket
	Egyptian cottonworm	*Spodoptera littoralis*	Bucket
	cotton cutworm	*Spodoptera litura*	Bucket

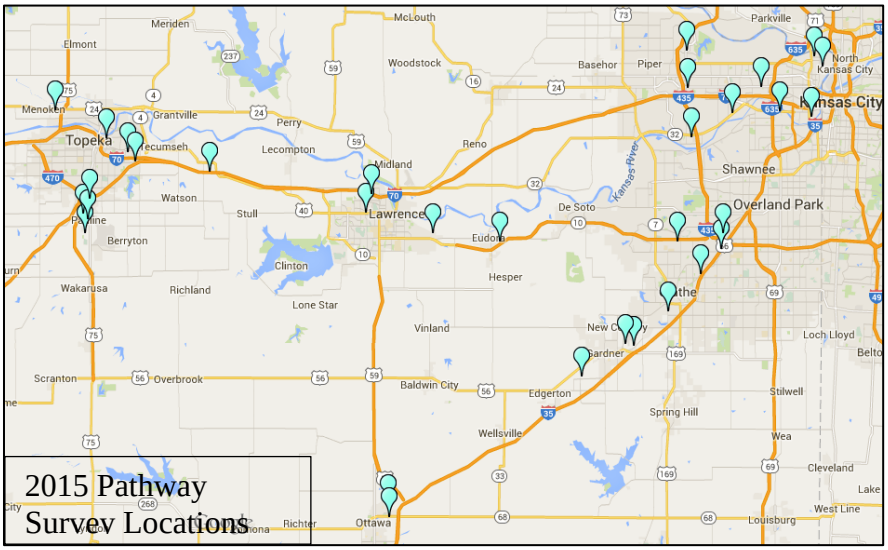
LOCATION	**# of Fields Trapped – 1 field per 25,000 acres***
FINNEY	7
BARTON	4
GRAY	4
PAWNEE	3
KEARNY	4
MARION	2
RICE	2
RENO	2
DICKINSON	3
STAFFORD	2
HASKELL	2
OTTAWA	2
FORD	2
Total Fields	**39**



- Pathway Survey: Early Detection of Exotic Plant Pests
  - Dates of trapping – May 19 – October 16, 2016 in 39 locations with 156 traps in 13 counties. All traps negative but 1
  - 32 locations (distribution centers, shipping hubs) in 5 counties (Douglas, Franklin, Johnson, Shawnee, Wyandotte) – 361 traps total
  - 1 seasonal staff – Brian Brunkow
  - 1 positive trap for European gypsy moth in Johnson county – Edwardsville at a distribution center
  - All other pests were negative

	Common Name	**Scientific Name**	**Trapping Method**
Pest:	Cucurbit beetle	*Diabrotica speciosa*	Visual
	Whitefringed weevil	*Naupactus leucoloma*	Pitfall
	Twobanded Japanese weevil	*Pseudocneorhinus bifasciatus*	Pitfall
	European wireworm	*Agriotes sputator*	Pitfall
	European wireworm	*Agriotes ustulatus*	Pitfall
	Oriental beetle	*Anomala orientalis*	Pitfall
	European chafer	*Rhizotrogus majalis*	Pitfall
	Argentine ant	*Linepithema humile*	Protein Bait
	Imported fire ant	*Solenopsis invicta*	Protein Bait
	Okinawa Gypsy Moth	*Lymantria albescens*	Delta
	Asian Gypsy Moth	*Lymantria dispar asiatica*	Delta
	Japanese Gypsy Moth	*Lymantria dispar japonica*	Delta
	White-winged Gypsy Moth	*Lymantria postalba*	Delta
	Hokkaido Gypsy Moth	*Lymantria umbrosa*	Delta
	Horse Thistle	*Onopordum acaulon*	Visual

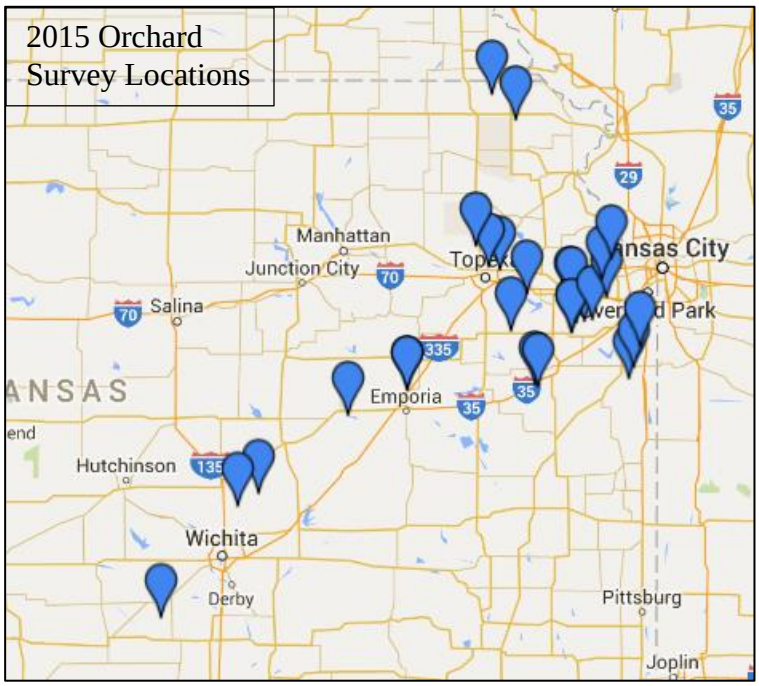
	Striped helicella snail	*Cernuella cisalpina*	Visual
	Striped snail	*Cernuella virgata*	Visual
	Helicid snail	*Cochlicella* spp.	Visual
	Helicid snail	*Monacha spp.*	Visual
	Veronicellid Slug	*Veronicella* spp.	Visual



2015 Farmbill:

- Orchard
  - Dates of trapping – July 1 – November 23, 2015 in 29 locations with 180 traps in 14 counties. All traps negative
  - 1 seasonal staff person – Brent Jones
  - 16 samples for disease identification sent to Craig Webb at Kansas State University
  - 2,369 specimens from 189 traps sent to the Washington Department of Agriculture

	Common Name	**Scientific Name**	**Trapping Method**
Pest:	summer fruit tortrix	*Adoxophyes orana*	Delta
	cherry bark tortrix	*Enarmonia formosana*	Delta
	old world bollworm	*Helicoverpa armigera*	Bucket
	brown marmorated stinkbug	*Halyomorpha halys*	Dead Inn® stinkbug trap
	Asiatic brown rot	*Monilinia polystroma*	Visual
	apple brown rot	*Monilinia fructigena*	Visual
	apple proliferation	*Candidatus Phytoplasma mali*	Visual



2016 CAPS and line items plan:

- Pathway Survey: Early Detection of Exotic Plant Pests
  - Planned for 2 years
  - Dates of survey: April 4, 2016 – September
  - 35 shipping hub locations (product distribution centers)
  - Kansas City area - Douglas, Franklin, Johnson, Shawnee and Wyandotte
  - 1 seasonal staff person (Brian Brunkow)
  - Traps – pitfall, delta, protein bait and visual
  - 2 delta, 3 pitfall and protein bait at each location

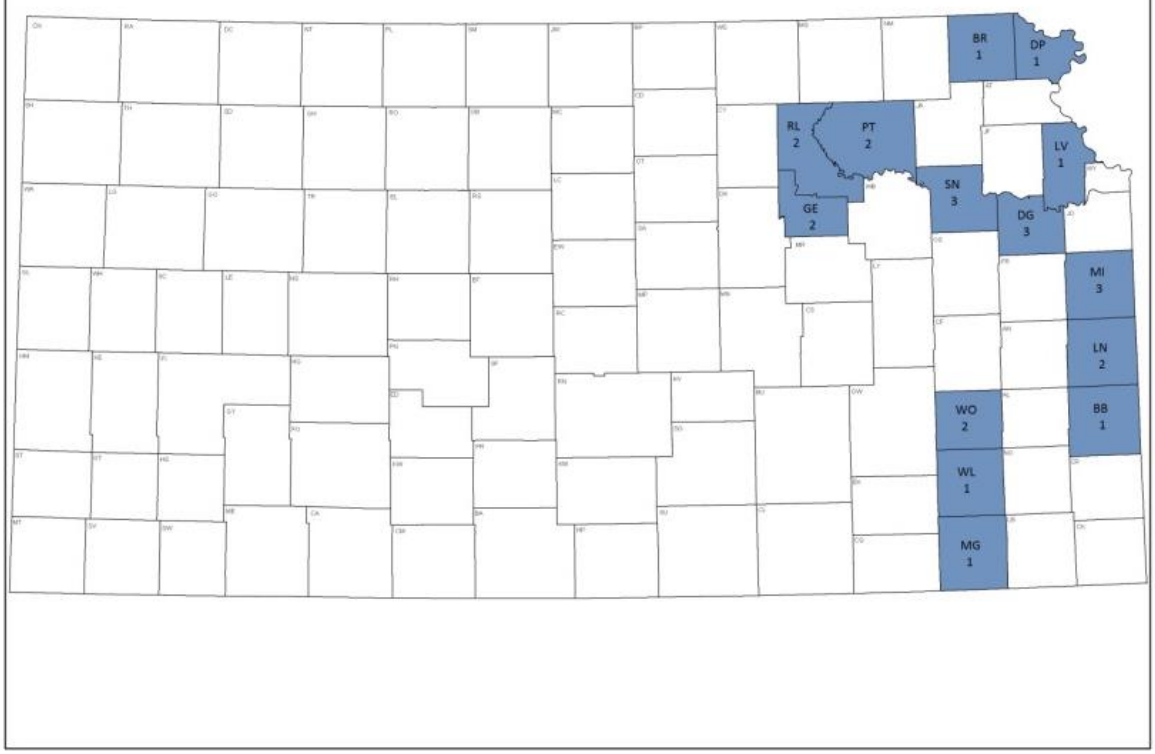
	Common Name	**Scientific Name**	**Trapping Method**
Pest:	Cucurbit beetle	*Diabrotica speciosa*	Visual
	Whitefringed weevil	*Naupactus leucoloma*	Pitfall
	Twobanded Japanese weevil	*Pseudocneorhinus bifasciatus*	Pitfall
	European wireworm	*Agriotes sputator*	Pitfall
	European wireworm	*Agriotes ustulatus*	Pitfall
	Oriental beetle	*Anomala orientalis*	Pitfall
	European chafer	*Rhizotrogus majalis*	Pitfall
	Argentine ant	*Linepithema humile*	Protein Bait
	Imported fire ant	*Solenopsis invicta*	Protein Bait
	Okinawa Gypsy Moth	*Lymantria albescens*	Delta

	Asian Gypsy Moth	*Lymantria dispar asiatica*	Delta
	Japanese Gypsy Moth	*Lymantria dispar japonica*	Delta
	White-winged Gypsy Moth	*Lymantria postalba*	Delta
	Hokkaido Gypsy Moth	*Lymantria umbrosa*	Delta
	Horse Thistle	*Onopordum acaulon*	Visual
	Striped helicella snail	*Cernuella cisalpina*	Visual
	Striped snail	*Cernuella virgata*	Visual
	Helicid snail	*Cochlicella* spp.	Visual
	Helicid snail	*Monacha spp.*	Visual
	Veronicellid Slug	*Veronicella* spp.	Visual

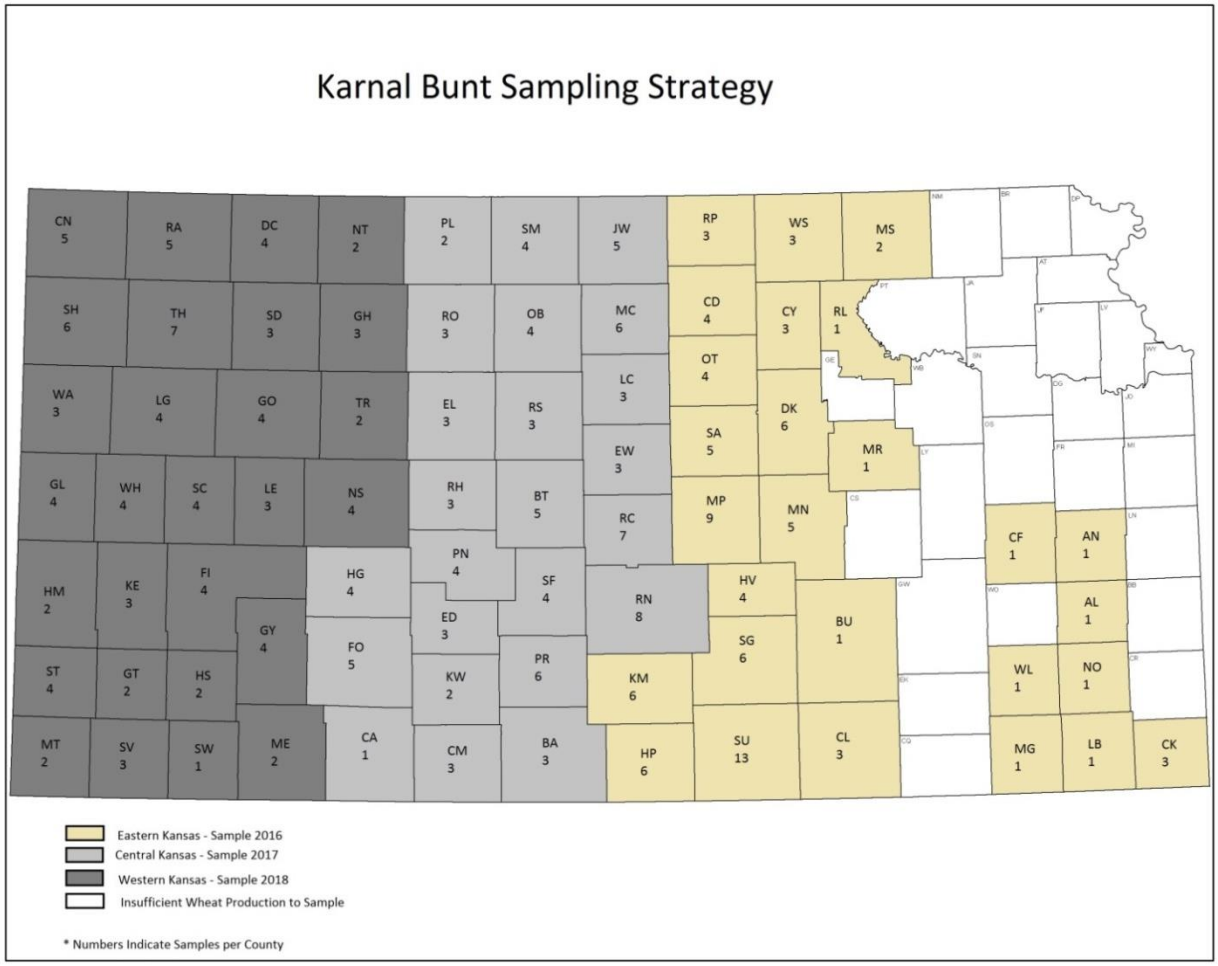
- Exotic wood borer/bark beetle – 25 sites are planned to be trapped and visually surveyed for cerceris colonies. Biosurveillance for cerceris wasp colonies will occur at ball fields, schools, parks and townships.
    - Dates of survey: May 10, 2016 – July
    - 25 locations – parks, recreation areas, public areas
    - 1 seasonal staff person (Kristina Hamilton)
    - Traps – Lindgren funnel, cross vane and visual
    - 3 Lindgren funnel and 1 cross-vane at each location

	Common Name	**Scientific Name**	**Trapping Method**
Pest:	Japanese pine sawyer	*Monochamus alternatus*	Lindgren funnel
	oak ambrosia beetle	*Platypus quercivorus*	Lindgren funnel
	European hardwood ambrosia beetle	*Trypodendron domesticum*	Lindgren funnel
	black spruce beetle	*Tetropium castaneum*	cross-vane panel
	goldspotted oak borer	*Agrilus auroguttatus*	Visual (cerceris colonies)
	oak splendor beetle	*Agrilus biguttatus*	Visual (cerceris colonies)
	European oak borer	*Agrilus sulcollis*	Visual (cerceris colonies)
	emerald ash borer	*Agrilus planipennis*	Visual (cerceris colonies)

2016 Exotic Counties and Number of Locations



- Karnal bunt – 99 samples planned in the eastern part of the state – survey done by KDA staff



Other:

- EAB trapping for 2016 is contracted out by USDA.

- Tree Girdling – 16 trees - 1 in Atchison , 1 in Doniphan, 2 in Miami, 4 in Shawnee and 1in Franklin county (serviced by Jeff Vogel). 3 in Labette, 1 in Crawford and 3 in Cherokee (serviced by Jeremy Maples). They will be serviced through the summer and then taken down and bark peeled in the late summer and fall.

USDA-APHIS-PPQ Updates:

- Jeff Hash State Plant Health Director (SPHD) was unable to attend due to vehicle trouble.
- Still waiting on approval to hire a Pest Survey Specialist (PSS) to replace Erin Stiers who left in October.
- Gypsy Moth – Delimiting traps set in Kansas City area being done mostly by Barry Cole and Jeff Hash.
- Allison Matthews – New Secretary for USDA-APHIS-PPQ in Topeka has been hired and working for several months now.
- Craig Webb – In the process of hiring 2 part-time and 1 full time for his lab. For 2 weeks Amanda Kaye has been helping out from the East.

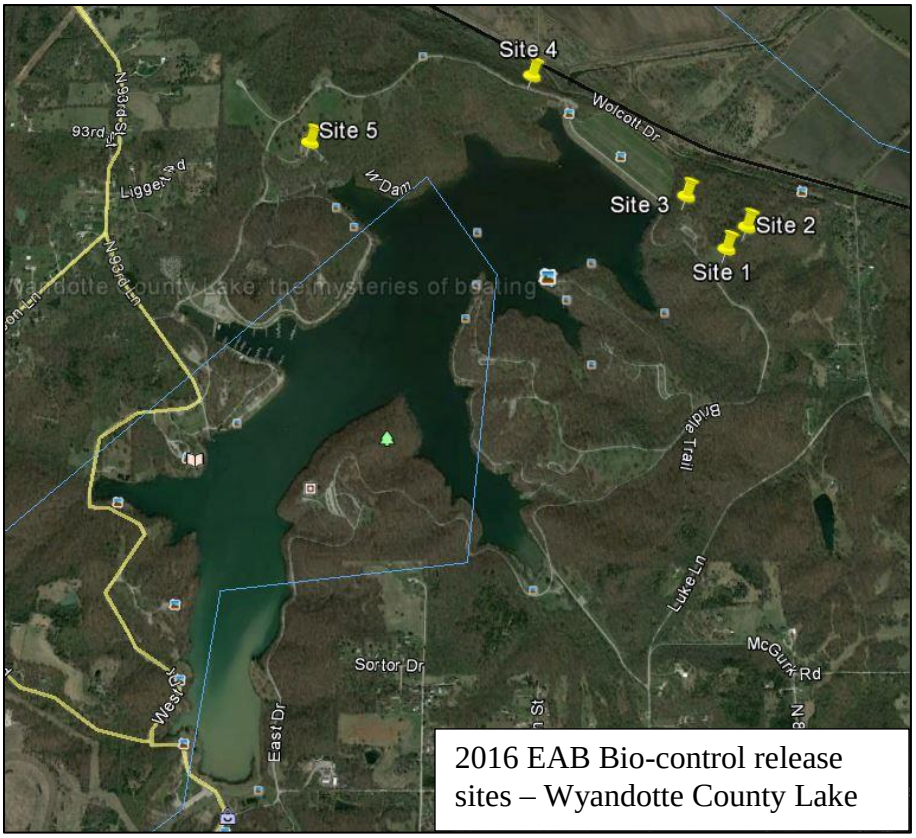
KDA Specialist Updates:

Jeff Vogel:

- Flag Smut was found in 2015 which hadn't been found since the 1930's
- 2015 – 500 wheat fields were surveyed and 39 were positive
- Farmers from 30 of the 39 positive fields were contacted about best management practices (BMP's)
- 2016 - Limited Flag Smut survey is contracted out to Jon Appel in 2015 positive areas
- New counties so far are Ellsworth and Clay this year
- Some of the positive fields from last year were left fallow this year

Greg Chrislip:

- Bio-control releases are occurring weekly at Wyandotte County Lake for EAB. Two releases have occurred so far.
  - First release: 908 female *Tetrastichus* in 15 bolts at 5 sites.
  - Second release: 612 female *Tetrastichus* in 10 bolts, 308 adult female *Spathius agrili* in 12 cups, 1250 female *Oobius agili* in 13 Oobinators at 5 sites.



2016 EAB Bio-control release sites – Wyandotte County Lake

- Walnut twig beetle will occur with 5 traps set in 4 of the field staff areas. The western area will have the western 2 tiers of counties traps where walnut is available.
- Brown marmorated stinkbug will be trapped for with 5 traps in the 5 field staff areas

- Pathway survey specimens are beginning to come in.

Gaelle Hollandbeck:
- Greenhouses – viral complex is being found in Nandina – Cucumber Mosaic Virus, Tobacco Mosaic Virus, Tomato Wilt Virus
- Working on trace backs – destroying plants in the mean time
- Peonies – Tobacco Rattle Virus is being found
- Working on trace backs
- Talking with Missouri – they are doing molecular testing – still no definitive answer
- Most plants are from Oklahoma
- Judy would like a Hosta Virus X plant if one is available.

Scott Marsh:
- Noxious weeds seems to be trending down ward the last couple of years, but data is not consistently taken
- Asking weed directors to confirm absence of Russian knapweed so we can say it has been eradicated
- Old World Bluestem is currently in 91 counties
- Biocontrol – 2013 Diorhabda found mostly in southwestern counties. 2015 unable to find it and so far in 2016 it has not been found. Could be due to wet and flooding conditions.
- Hydrilla – found in 2007 in Kansas City area still not eradicated but continuing to treat and survey downstream.

<u>Specialist Updates:</u>

Doug Jardine:
- Wheat – stripe rust problems being seen but Kansas is drought free for first time since 2007
- Light levels of wheat scab by Seneca
- 2015 – Grey Leaf Spot worst at 3% - usually around 0.1% - most producers didn't spray because of price of corn
- 2016 – Southern rust arrived – not usually seen until in late June – earliest seen
- 2016 – Soybean rust found in Mississippi already
- Lots of hail damage this year – Goss' Wilt could be a problem

Walt Fick:
- Old world bluestem – Imazapyr seems to work well and doesn't harm natives but needs to have continuous treatment – May need to renovate patches
- Sericea lespedeza – continual treatment needed. Can graze sheep in late summer but seems to be resistant to grazing pressure. Burn in August-September. Use and integrated approach.
- Salt Cedar – not seeing beetle. Using some herbicide – Arsenal and/or Round-Up. Plateau can be sprayed on foliage.
- Black Swallow Wort – Morris County – spot treating

Judy O'Mara:
- Still tracking Pine Wilt in the west. Want to keep map up to date – Pine Wilt Initiative

- Fields still being checked for wheat nematode survey
- Seeing Impatiens Downy Mildew

Megan Kennelly:
- New department head, Marty Draper will begin in July
- Seeing lots of diseases and yellowing due to the wet weather
- Pine Wilt Nematode PCR testing being done

Chris Steffen:
- Survey for zebra mussels continuing – 27 lakes infested which 60% of the acreage. Find 2 new waterways a year.
- Curly leaf pond weed – looking to eradicate in smaller lakes
- Asian Carp survey – North end of Lawrence, Bowersocks Dam
- Yellow Flag Iris – at a few of the smaller lakes.

Sharon Dobesh:
- GPDN – Tan Spot of wheat regional survey being done – South Dakota is doing the testing
- Bee Keeping – increasing dramatically. Small hive beetle in eastern part of the state, more sparse in western part.
- Varroa Mite and winter kill problems being seen

Ryan Armbrust:
- Northeast Lawrence in deep woods may have EAB – silviculture area woodlands
- Milford Lake – ash problems
- Ottawa County – pine shoot moth – look for webbing on trunks of black walnut
- Bush honeysuckle mapping – working on
- Invasive Plant Detector workshops – 4 per year in different parts of the state
- Oak Wilt – possibly in Cherokee county
- Calls on bagworms and oak leaf vein gall

<u>Survey Ideas:</u>
- Tobacco Streak Virus Survey - Tobacco Streak Virus in soybean – looks the same as Tobacco Ringspot
- Virus Survey – soybean necrosis vein virus – green plants still in field at harvest time
- Corn – wheat mosaic streak virus
- Nematodes in corn – lesion – molecular identify
- Spotted Knapweed Survey
- Diarhabda

Thanks to all that attended and added information!

Nursery Pest Newsletter

Spring 2016

Kansas Plant Pest Act and the Pest Freedom Standards
Jennifer Smith, Kansas City Metro Area Specialist

What's the big deal about a few insects, weeds, or diseased plants? Hopefully you already know and care about the answer to this question, but sometimes live plant dealers ask about certain pests or are unsure how statutes and laws apply to them. The Plant Pest and Agriculture Commodity Certification Act (Plant Pest Act for short) is the major statute affecting live plant dealers. The major purpose of the act is to protect the state from outbreaks of dangerous plant pests and diseases. Protection is supported by area inspectors and state specialists who work to locate pests and take appropriate action when necessary.

One portion of the Plant Pest Act calls for and defines the licensing of live plant "dealers" (not just growers) because retail garden centers, landscapers, florists, lawn care companies who install sod, and others are involved in the movement of plants. Any time plants are moved, there is a risk of moving pests with them.

The other major portion of the act affecting live plant dealers is the Pest Freedom Standards (K.A.R. 4-15-10). This section identifies specific pests and limits of these pests. As a reminder, the Pest Freedom Standards include:

- Zero tolerance for all life stages of borers, scarab beetles (including larvae aka white grubs), scale insects, and weevils
- Zero tolerance for viruses, viroids, phytoplasmas, spiroplasmas, mycoplasmas, phytophthora diseases, pine wilt nematode, root knot nematode, fire blight, crown gall, and bacterial wilt
- Minimal tolerance (< than 5 percent of the lot or group) for other wilts, galls, cankers, root rots, and crown rots
- Minimal tolerance (< than 5 percent of the lot or group) for plants affected by plant parasitic nematodes
- Low tolerance (< than 15 percent of the lot has more than 10 percent of foliage affected) for foliar diseases of non-evergreen plants
- Low tolerance (< than 5 percent of the lot has more than 1 percent of foliage affected) for foliar diseases of evergreens

Inspectors also work under the authority of the Kansas Tree and Shrubbery Law, the Kansas Noxious Weed Law and Regulations, the Black Stem Rust Law, and several state and federal quarantines including quarantines for emerald ash borer and thousand cankers of walnut.

Plants infested with pests not listed in quarantines or in the Kansas Pest Freedom Standards may still be subject to regulatory action as necessary to prevent economic or environmental harm. Also, plants to be exported from Kansas are subject to the requirements of the destination state or country which may be more stringent than Kansas' regulations.

The Plant Pest Act was enacted in 1907 and has been amended periodically with the latest update in 2012. When changes are needed, the Kansas Department of Agriculture (KDA) works with stakeholder groups such as the Kansas Nursery and Landscape Association. The full text of the statute is available on the KDA website at http://agriculture.ks.gov/divisions-programs/plant-protect-weed-control, under "Statutes, Regulations and Quarantines."

With Plant Pathology; an ounce of prevention is worth a pound of cure
Robert Buhler, Western Kansas Area Specialist

Plant diseases can be very difficult or impossible to cure once a plant becomes infected, but a little prevention can make the difference between having a marketable plant and one that ends up in the dumpster.
In greenhouse situations, the grower may want to consider the following questions:

Are there weeds growing in the greenhouse or just outside the greenhouse?
Weeds are a major harbor for plant diseases and insect vectors. Controlling weeds can significantly reduce the risk of plant disease infection in your crop.

When your plants arrive, do you examine them for plant diseases or insects?
Examining your plants upon arrival may prevent major problems in the future. This is also the best time for making a claim to the supplier. If you feel the plants are infested with disease or insects, feel free to contact your area plant protection specialist for assistance. Contact information can be found on page 4 of this newsletter.

Did you thoroughly clean your benches and used pots prior to use?
Are you using pasteurized potting mix? Are you reusing potting mix and have you heat-treated it?
Are you removing dead and dying plants from your greenhouse?
Good sanitation goes a long way toward preventing future problems with plant diseases. When you clean out dead and dying plants, get rid of them! Making a pile inside the greenhouse or just outside the greenhouse keeps the disease inoculum in proximity to your plants.

Many of the things mentioned above also apply to woody plants:

- You should always examine your newly arrived woody plants for disease and insects.
- If you repot your woody plants, make sure any used pots are clean and the soilless mix has been pasteurized.
- Keep the weeds under control around your nursery stock to prevent the transfer of disease and insects from this harboring source.
- Get rid of dead and dying woody stock. These things provide a wonderful home for borers and canker diseases. Also, don't just make a pile of dead material in your nursery. Get rid of it! Your three choices are burn, bury or chip finely.

This is just a beginning list. Depending on the crop, there are many additional management strategies for the prevention of plant diseases. If you need assistance with your live plant operation concerning plant diseases, insects or weeds feel free to contact your KDA area plant protection specialist for assistance.

Spring Cleaning the Garden
Greg Chrislip, State Entomologist

1. Clean up any fallen twigs and branches—, they may harbor insect pests that overwinter inside the branches or in bark crevices. Inspect your trees and shrubs for broken branches and prune out the affected portion of the plant. Broken limbs are pathways for pathogens and insects to enter the plant.

2. Clean up fallen leaves and fruit. If you had a problem with chestnut or acorn weevils and you waited until spring to clean up, you are too late. The larva chews out of the nuts in the fall and pupate in the ground. Plum curculio over winters in leaf litter or the soil. The curculio becomes active normally near the time that apples are blossoming, so remove leaf litter early. Removing the leaf litter can reduce adult populations that feed on the newly emerging leaves, flowers and fruits.

3. Inspect the perennial plants for winter damage and clean up any leftover blossoms or leaves.

Remove leaves that have blown around the plants. If you missed cutting back the iris plants in the fall, do it early before eggs on the leaves begin to hatch, when the new leaves emerge in April or early May.

4. Cultivate early: turning the soil over early in the spring exposes insects in the soil to freezing temperatures. This is not advised for heavy clay soils.

5. Pulling the mulch back from the foundation of the house so that a six inch area of soil is left exposed will help eliminate pests getting into the home as the weather warms. A barrier spray can be applied at the same time.

"Banking" on Future Generations of Weeds
Scott Marsh, State Weeds Specialist

No, we are not planning on or hoping for weeds to grow into the future. The weeds themselves however, are doing just that.

You may have heard about the tens of thousands of seeds our noxious weeds can produce each year. What you may not have heard is that not all of those seeds germinate into new plants the next spring. - Many of them, in some cases a majority of them, remain in the soil for many years, even decades after they were produced. They are the weeds' back-up plan in case the germinating seeds are killed off by responsible, law-abiding landowners.

Those dormant seeds in the soil are known collectively as the seed bank. When the soil gets warmer than usual, like when the growing plants die off or other favorable conditions occur, these seeds will germinate into new plants.

You may have noticed that after you have aggressively controlled every weed you could find, more seem to pop up out of nowhere. These are withdrawals from the seed bank.

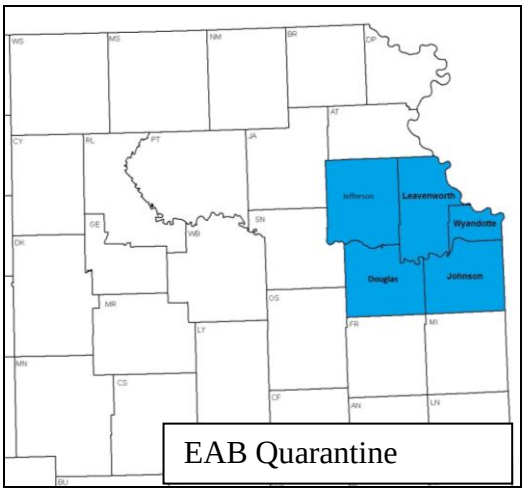
The best way to combat the seed bank is to control your weed infestations early before too many generations of seeds are produced and to control growing weeds before they flower and produce even more seeds.

Trapping and Survey Programs

Emerald Ash Borer — The national trapping survey for emerald ash borer in 2015 consisted of setting 172 purple prism traps and 14 green Lindgren funnel traps coated with fluon throughout Kansas. Of these, 71 were set by KDA and 313 were set by the USDA's Animal and Plant Health Inspection Service's Plant Protection and Quarantine (USDA-APHIS-PPQ). The state trapped Atchison, Barton, Bourbon, Butler, Cherokee, Crawford, Doniphan, Douglas, Graham, Harvey, Jefferson, Labette, Linn, Neosho, Pawnee, Reno, Rooks, Riley, Russell, Shawnee, Sheridan, Sherman and Trego counties. The traps were to be put up in USDA pre-planned areas. If those areas were not suitable, then the traps were moved to campground sites or other high risk locations. The traps were up from March until September. All traps were negative for emerald ash borer. For information on the emerald ash borer, visit: www.emeraldashborer.info

On September 30, four larvae were removed while peeling a tree that was girdled and checked over the summer in Eudora. Confirmation of the presence of emerald ash borer (EAB) was made on October 8 by USDA-APHIS-PPQ.

Then, on October 21, six larvae were found when a girdled tree was peeled at Perry Lake below the dam. Regulatory officials with the USDA-APHIS-PPQ confirmed the presence of emerald ash borer on October 23. See below map for current quarantine counties.



Sixteen girdled trap trees were set, one in Atchison, two in Butler, three in Douglas, one in Jefferson, two in Miami, five in Reno and two in Sedgwick County. The trees were girdled in April and then removed and peeled in September and October.

Pathway Survey — The first year of a two year (2015 and 2016) pathway survey occurred at 30 sites during May to October 2015 at high-risk container yards looking for new exotic plant pest species that are potentially harmful to agriculture/horticulture. The survey occurred in Douglas, Franklin, Johnson, Shawnee and Wyandotte Counties. One European gypsy moth was found on August 7 in the Edwardsville area. USDA-APHIS will be doing a delimiting survey in 2016. This same survey will continue in 2016 but with 35 sites.

Exotic Wood Borers/Bark Beetle Survey — For 2016, a survey is planned looking for exotic wood borers and bark beetles. Cerceris wasp colonies (native biocontrol wasp) will be visually surveyed at 25 sites looking for dropped prey consisting of the gold spotted oak borer, oak splendor beetle, European oak borer and emerald ash borer. Traps will be set for Japanese pine sawyer, oak ambrosia beetle, European hardwood ambrosia beetle and black spruce beetle. The traps will be placed in forests, lumber processing facilities and parks for two months (May and June). Bio surveillance for cerceris wasp colonies will occur at ball fields at schools, parks and townships during the same time frame.

We always appreciate the live plant dealers and land owners who let us put traps on their property. This type of work is of great importance in protecting Kansas. Early detection will improve the odds of eradication and containment success if the pests are found.

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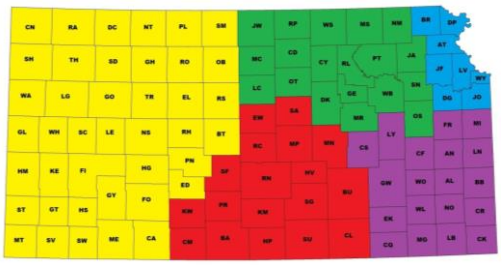

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indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51

Approved and signed by

_____ Date: _____
Cooperator

_____ Date: _____
ADODR